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GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: November 9, 2002, 03:16:01 ; Search time 80 Seconds
(without alignments)
316.470 Million cell updates/sec

Title: US-09-895-298A-83
Perfect score: 1002
Sequence: 1 MMNFQPPSKAWRASQMMTFF.....HDGSLDLRSRRSVQEGNPRA 190

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_101002:*
1: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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7: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
8: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*
9: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*
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16: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*
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18: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:*
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20: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:*
21: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001.DAT:*
23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1002	100.0	191	21	AAB24458	Human secreted pro
2	1002	100.0	191	22	AAB83082	Human CASB6411-rel
3	1002	100.0	268	22	AAM79104	Human protein SEQ
4	1002	100.0	280	22	ABB11361	Human LAK-4p homol
5	1002	100.0	280	22	AAM80088	Human protein SEQ
6	1002	100.0	330	22	AAB95481	Human protein sequ
7	1002	100.0	387	21	AAB08764	A human leukocyte
8	1002	100.0	438	22	AAB83081	Human CASB6411-rel
9	1002	100.0	460	22	AAB83079	Human CASB6411 pro
10	292.5	29.2	305	23	ABP41828	Human ovarian anti
11	148	14.8	31	22	ABB39891	Peptide #7397 enco
12	148	14.8	31	22	AAM60631	Human brain expres
13	148	14.8	31	22	AAM73303	Human bone marrow
14	148	14.8	31	22	AAM33503	Peptide #7540 enco
15	148	14.8	31	23	ABG43154	Human peptide enco
16	122	12.2	88	20	AAY00264	Human secreted pro
17	97	9.7	992	22	ABG28109	Novel human diagno
18	94	9.4	40	20	AAY00348	Fragment of human
19	90.5	9.0	229	23	ABG64734	Human albumin fusi
20	90.5	9.0	229	23	ABG64736	Human albumin fusi
21	90.5	9.0	229	23	AAO17174	Human secreted pro
22	90.5	9.0	229	23	AAO17199	Human secreted pro
23	90.5	9.0	334	23	AAO17232	Human secreted pro
24	89	8.9	272	21	AAG14398	Arabidopsis thalia
25	89	8.9	291	21	AAG14397	Arabidopsis thalia
26	88.5	8.8	589	21	AAY94906	Human secreted pro
27	88.5	8.8	706	22	AAB74730	Human membrane ass
28	87	8.7	272	21	AAG52106	Arabidopsis thalia
29	87	8.7	291	21	AAG52105	Arabidopsis thalia
30	84	8.4	273	21	AAG42362	Arabidopsis thalia
31	83.5	8.3	339	23	ABP26928	Streptococcus poly
32	83.5	8.3	339	23	ABP29763	Streptococcus poly
33	82.5	8.2	308	22	AAG82676	S. epidermidis ope
34	82.5	8.2	310	22	AAB87824	Mouse T2R31 amino
35	80.5	8.0	248	23	ABB89249	Human polypeptide
36	80	8.0	203	23	ABP28118	Streptococcus poly
37	80	8.0	242	21	AAB16293	Pinus radiata anne
38	80	8.0	426	22	AAU12280	Human PRO6028 poly
39	79.5	7.9	154	23	ABB49141	Listeria monocytog
40	79	7.9	473	22	AAG81483	S. epidermidis ope
41	79	7.9	496	23	ABP38156	Staphylococcus epi
42	78	7.8	107	18	AAY11315	S. pneumoniae prot
43	77.5	7.7	306	21	AAB18274	Plasmodium falcipa
44	77.5	7.7	596	22	AAU33748	Staphylococcus aur
45	77.5	7.7	604	22	AAU36932	Staphylococcus aur

ALIGNMENTS

RESULT 1
AAB24458
ID AAB24458 standard; Protein; 191 AA.
XX
AC AAB24458;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human secreted protein sequence encoded by gene 22 SEQ ID NO:83.
XX
KW Human; secreted protein; cytostatic; antianaemic; antidiabetic;
KW antiinflammatory; ophthalmological; antirheumatic; antiarthritic;
KW antipsoriatic; antiangiogenic; cardiant; anti-HIV; nootropic;
KW neuroprotective; antimicrobial; antiparkinsonian; cancer;
KW immune system disorder; angiogenesis; hyperproliferative disorder;
KW cardiovascular disorder; apoptosis; neurological disease;
KW infectious disease; wound healing.
XX
OS Homo sapiens.
XX
PN WO200035937-A1.
XX
PD 22-JUN-2000.
XX
PF 16-DEC-1999; 99WO-US29950.
XX
PR 17-DEC-1998; 98US-0112809.
PR 18-DEC-1998; 98US-0113006.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ruben SM, Ebner R, Rosen CA, Endress GA, Soppet DR, Ni J;
PI Duan DR, Moore PA, Shi Y, Lafleur DW, Olsen HS, Florence K;

```
XX
DR   WPI; 2000-431566/37.
DR   N-PSDB; AAA78402.
XX
PT   Forty seven human nucleic acids encoding secreted proteins, useful in
PT   the treatment, prevention and diagnosis of cancers, disorders of the
PT   immune system, angiogenesis disorders, neurological diseases and
PT   hyperproliferative disorders -
XX
PS   Claim 11; Page 496; 562pp; English.
XX
CC   The polynucleotide sequence given in AAA78381 to AAA78432 encode the
CC   human secreted proteins given in AAB24437 to AAB24604. Human secreted
CC   proteins have activities based on the tissues and cells the genes are
CC   expressed in. Examples of activities include: cytostatic; antianaemic;
CC   antidiabetic; antiinflammatory; ophthalmological; antirheumatic;
CC   antiarthritic; antipsoriatic; antiangiogenic; cardiant; anti-HIV;
CC   nootropic; neuroprotective; antimicrobial and antiparkinsonian.
CC   Human secreted protein polynucleotides, polypeptides, antagonists and/or
CC   agonists may be useful in treating, preventing, and/or diagnosing other
CC   diseases, disorders, and/or conditions such as: (a) cancers; (b)
CC   disorders of the immune system; (c) angiogenesis disorders; (d)
CC   hyperproliferative disorders; (e) cardiovascular disorders; (f) diseases
CC   associated with increase apoptosis; (g) neurological diseases; and
CC   (h) infectious diseases. They are also used to promote wound healing.
CC   AAA78372 to AAA78380 and AAB24436 represent sequences used in the
CC   exemplification of the present invention.
XX
SQ   Sequence   191 AA;

  Query Match             100.0%;  Score 1002;  DB 21;  Length 191;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60

Qy      61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120

Qy     121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180

Qy     181 RSVQEGNPRA 190
           ||||||||||
Db     181 RSVQEGNPRA 190


RESULT 2
AAB83082
ID   AAB83082 standard; Protein; 191 AA.
XX
AC   AAB83082;
XX
DT   29-JUN-2001  (first entry)
XX
DE   Human CASB6411-related partial polypeptide #2.
XX
KW   Human; CASB6411; vaccine; gene therapy; immunoprophylaxis;
KW   ovarian cancer; colon cancer; autoimmune disease.
XX
OS   Homo sapiens.
XX
PN   WO200123417-A2.
XX
PD   05-APR-2001.
XX
PF   27-SEP-2000; 2000WO-EP09500.
XX
PR   30-SEP-1999;   99GB-0023154.
PR   07-JUL-2000; 2000GB-0016839.
XX
PA   (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
XX
PI   Vinals De Bassols YC;
XX
DR   WPI; 2001-316133/33.
DR   N-PSDB; AAF82463.
XX
PT   Novel CASB6411 polypeptides useful in diagnostics, and as vaccines for
PT   prophylactic and therapeutic treatment of cancers, particularly ovarian
PT   and colon cancers, autoimmune diseases and related conditions  -
XX
PS   Disclosure; Page 67; 95pp; English.
XX
CC   The present sequence is provided in a specification relating
CC   to CASB6411 polypeptides comprising a sequence having at least 70%
CC   identity to a sequence of 460 or 154 amino acids fully defined in
CC   the specification. CASB6411 polypeptides and polynucleotides are
CC   useful for treating a subject by immunoprophylaxis or therapy.
CC   The CASB6411 polypeptides are useful in diagnostics, and as
CC   vaccines for prophylactic and therapeutic treatment of cancers,
CC   particularly ovarian and colon cancers, autoimmune diseases and related
CC   conditions. CASB6411 polypeptides are also useful for the
CC   structure-based design of agonists, antagonists or inhibitors of the
CC   polypeptide.
XX
SQ   Sequence   191 AA;

  Query Match             100.0%;  Score 1002;  DB 22;  Length 191;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 61

Qy      61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 121

Qy     121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 181

Qy     181 RSVQEGNPRA 190
           ||||||||||
Db     182 RSVQEGNPRA 191


RESULT 3
AAM79104
ID   AAM79104 standard; Protein; 268 AA.
XX
AC   AAM79104;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human protein SEQ ID NO 1766.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorder; arthritis; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200157190-A2.
XX
PD   09-AUG-2001.
XX
PF   05-FEB-2001; 2001WO-US04098.
XX
```

PR 03-FEB-2000; 2000US-0496914.
PR 27-APR-2000; 2000US-0560875.
PR 20-JUN-2000; 2000US-0598075.
PR 19-JUL-2000; 2000US-0620325.
PR 01-SEP-2000; 2000US-0654936.
PR 15-SEP-2000; 2000US-0663561.
PR 20-OCT-2000; 2000US-0693325.
PR 30-NOV-2000; 2000US-0728422.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT, Asundi V, Zhou P, Xu C, Cao Y, Ma Y;
PI Zhao QA, Wang D, Wang J, Zhang J, Ren F, Chen R, Wang ZW;
PI Xue AJ, Yang Y, Wejhrman T, Goodrich R;
XX
DR WPI; 2001-476283/51.
DR N-PSDB; AAK52237.
XX
PT Nucleic acids encoding polypeptides with cytokine-like activities,
PT useful in diagnosis and gene therapy -
XX
PS Claim 20; Page 4113-4114; 6221pp; English.
XX
CC The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC inflammation.
CC Note: Records for SEQ ID NO 2110 (AAK52581), 2111 (AAK52582) and 3666
CC (AAM80020) are omitted as the relevant pages from the sequence listing
CC were missing at the time of publication.
XX
SQ Sequence 268 AA;

Query Match 100.0%; Score 1002; DB 22; Length 268;
Best Local Similarity 100.0%; Pred. No. 3.4e-111;
Matches 190; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      79 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 138

Qy      61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     139 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 198

Qy     121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     199 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 258

Qy     181 RSVQEGNPRA 190
          ||||||||||
Db     259 RSVQEGNPRA 268
```

RESULT 4
ABB11361
ID ABB11361 standard; peptide; 280 AA.
XX
AC ABB11361;
XX
DT 11-JAN-2002 (first entry)
XX
DE Human LAK-4p homologue, SEQ ID NO:1731.
XX
KW Human; cytokine; cell proliferation; cell differentiation; growth factor;
KW haematopoiesis regulation; tissue growth; immunomodulator; activin;
KW inhibin; chemotaxis; chemokinesis; thrombolysis; oncogenesis;
KW proliferation; metastasis; cancer; tumour; haematopoietic disorder;
KW myeloid cell disorder; lymphoid cell disorder; asthma; arthritis;
KW chronic inflammatory condition; proliferative retinopathy;
KW atherosclerosis; coronary heart disease; arterial ischaemia;
KW bone disorder; osteoporosis; vascular growth disorder;
KW tissue regeneration; wound healing; infection; immune disorder;
KW cell culture; drug screening; gene therapy; antiinflammatory;
KW antiasthmatic; antiarthritic; haemostatic; antiarteriosclerotic;
KW cytostatic; osteopathic; vasotropic; cardiant; virucide; antibacterial;
KW antifungal; vulnerary; antiulcer.
XX
OS Homo sapiens.
XX
PN WO200157188-A2.
XX
PD 09-AUG-2001.
XX
PF 05-FEB-2001; 2001WO-US03800.
XX
PR 03-FEB-2000; 2000US-0496914.
PR 27-APR-2000; 2000US-0560875.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-457740/49.
DR N-PSDB; ABA08605.
XX
PT Human proteins and DNA encoding sequences useful for preventing,
PT treating or ameliorating a medical condition in a mammalian subject
PT e.g. arthritis and cancer -
XX
PS Claim 20; Page 173; 1963pp; English.
XX
CC Sequences ABB10981-ABB12330 represent 1350 novel human polypeptides, and
CC sequences ABA08225-ABA09574 represent nucleic acids encoding them. The
CC invention also relates to vectors and recombinant host cells comprising a
CC nucleotide of the invention, methods of producing the novel polypeptides,
CC antibodies against the polypeptides, methods of detecting the nucleotides
CC or polypeptides in a sample, and methods of identifying compounds which
CC bind to polypeptides of the invention. Although novel, many of the
CC polypeptides of the invention have homology to known proteins, thereby
CC giving an insight into their probable biological activities, and hence
CC potential therapeutic applications. The polypeptides of the invention may
CC have various activities, including cytokine, cell proliferation or cell
CC differentiation activities; stem cell growth factor activity;
CC haematopoiesis regulatory activity; tissue growth activity;
CC immunomodulatory activity; activin- or inhibin-related activities;
CC chemotactic or chemokinetic activities; haemostatic, thrombotic or
CC thrombolytic activities; receptor or ligand activities; or may be
CC involved in oncogenesis, cancer cell proliferation or metastasis.
CC Depending on their biological activities, polypeptides and nucleotides of
CC the invention are useful for preventing, treating or ameliorating medical
CC conditions, e.g., by protein or gene therapy. Such conditions include
CC cancers, haematopoietic disorders (e.g.,myeloid or lymphoid cell
CC disorders), chronic inflammatory conditions (e.g., asthma or arthritis),
CC proliferative retinopathy, atherosclerosis, coronary heart disease,
CC arterial ischaemia, bone disorders (e.g., osteoporosis), and abnormal
CC vascular growth. Polypeptides involved with tissue regeneration and
CC repair (or nucleic acids encoding them) may be used to promote wound
CC healing (e.g., of burns, incisions and ulcers), while those with
CC immunomodulatory activities may be used in the treatment of viral,
CC bacterial and fungal infections in addition to immune disorders.
CC Polypeptides with growth factor activity may be used in cell cultures to
CC promote cell growth. For example, such polypeptides may be used to
CC manipulate stem cells in culture to give rise to neuroepithelial cells
CC that can be used to augment or replace cells damaged by illness,
CC autoimmune disease or accidental damage. The polypeptides and nucleotides
CC may also be used in the diagnosis of the above conditions, and in drug
CC screening techniques. The present sequence represents a novel human
CC polypeptide of the invention.

```
XX
SQ   Sequence   280 AA;

  Query Match            100.0%;  Score 1002;  DB 22;  Length 280;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     91 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 150

Qy     61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    151 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 210

Qy    121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    211 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 270

Qy    181 RSVQEGNPRA 190
          ||||||||||
Db    271 RSVQEGNPRA 280


RESULT 5
AAM80088
ID   AAM80088 standard; Protein; 280 AA.
XX
AC   AAM80088;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human protein SEQ ID NO 3734.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorder; arthritis; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200157190-A2.
XX
PD   09-AUG-2001.
XX
PF   05-FEB-2001; 2001WO-US04098.
XX
PR   03-FEB-2000; 2000US-0496914.
PR   27-APR-2000; 2000US-0560875.
PR   20-JUN-2000; 2000US-0598075.
PR   19-JUL-2000; 2000US-0620325.
PR   01-SEP-2000; 2000US-0654936.
PR   15-SEP-2000; 2000US-0663561.
PR   20-OCT-2000; 2000US-0693325.
PR   30-NOV-2000; 2000US-0728422.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT,  Asundi V,  Zhou P,  Xu C,  Cao Y,  Ma Y;
PI   Zhao QA,  Wang D,  Wang J,  Zhang J,  Ren F,  Chen R,  Wang ZW;
PI   Xue AJ,  Yang Y,  Wejhrman T,  Goodrich R;
XX
DR   WPI; 2001-476283/51.
DR   N-PSDB; AAK53221.
XX
PT   Nucleic acids encoding polypeptides with cytokine-like activities,
PT   useful in diagnosis and gene therapy -
XX
PS   Claim 20; Page 421; 6221pp; English.
XX
CC   The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC   encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation.
CC   Note: Records for SEQ ID NO 2110 (AAK52581), 2111 (AAK52582) and 3666
CC   (AAM80020) are omitted as the relevant pages from the sequence listing
CC   were missing at the time of publication.
XX
SQ   Sequence   280 AA;

  Query Match            100.0%;  Score 1002;  DB 22;  Length 280;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     91 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 150

Qy     61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    151 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 210

Qy    121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    211 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 270

Qy    181 RSVQEGNPRA 190
          ||||||||||
Db    271 RSVQEGNPRA 280


RESULT 6
AAB95481
ID   AAB95481 standard; Protein; 330 AA.
XX
AC   AAB95481;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human protein sequence SEQ ID NO:18002.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-0116126.
XX
PR   29-JUL-1999;   99JP-0248036.
PR   27-AUG-1999;   99JP-0300253.
PR   11-JAN-2000;  2000JP-0118776.
PR   02-MAY-2000;  2000JP-0183767.
PR   09-JUN-2000;  2000JP-0241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602
PT   full-length cDNAs defined in the specification, and for the detection
PT   and/or diagnosis of the abnormality of the proteins encoded by the
PT   full-length cDNAs -
XX
```

```
PS   Claim 8; SEQ ID 18002; 2537pp + CD ROM; English.
XX
CC   The present invention describes primer sets for synthesising 5602
CC   full-length cDNAs defined in the specification. Where a primer set
CC   comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC   to the complementary strand of a polynucleotide which comprises one of
CC   the 5602 nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in
CC   the specification. The primer sets can be used in antisense therapy and
CC   in gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC   AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC   represent oligonucleotides, all of which are used in the exemplification
CC   of the present invention.
XX
SQ   Sequence   330 AA;

  Query Match             100.0%;  Score 1002;  DB 22;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 4.5e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     141 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 200

Qy      61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     201 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 260

Qy     121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     261 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 320

Qy     181 RSVQEGNPRA 190
           ||||||||||
Db     321 RSVQEGNPRA 330


RESULT 7
AAB08764
ID   AAB08764 standard; Protein; 387 AA.
XX
AC   AAB08764;
XX
DT   02-JAN-2001  (first entry)
XX
DE   A human leukocyte and blood related protein (LBAP).
XX
KW   Human; leukocyte and blood related protein; LBAP; arteriosclerosis;
KW   cell proliferative disorder; actinic keratosis; atherosclerosis;
KW   bursitis; cirrhosis; hepatitis; mixed connective tissue disease; MCTD;
KW   myelofibrosis; paroxysmal nocturnal hemoglobinuria; cancer;
KW   adenocarcinoma; leukemia; lymphoma; melanoma; myeloma; sarcoma;
KW   teratocarcinoma; autoimmune disorder; inflammatory disorder;
KW   acquired immunodeficiency syndrome; AIDS; Addison's disease;
KW   adult respiratory distress syndrome; allergy; ankylosing spondylitis;
KW   amyloidosis; anaemia; asthma; autoimmune haemolytic anaemia; infection;
KW   Werner syndrome; haemodialysis; extracorporeal circulation; trauma.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..51
FT                   /note= "signal peptide"
FT   Domain          74..94
FT                   /note= "transmembrane domain"
FT   Modified-site   101
FT                   /note= "potential phosphorylation site"
FT   Domain          114..134
FT                   /note= "transmembrane domain"
FT   Modified-site   163
FT                   /note= "potential phosphorylation site"
FT   Domain          167..189
FT                   /note= "transmembrane domain"
FT   Modified-site   194
FT                   /note= "potential glycosylation site"
FT   Domain          213..237
FT                   /note= "transmembrane domain"
FT   Modified-site   261
FT                   /note= "potential phosphorylation site"
FT   Modified-site   267
FT                   /note= "potential phosphorylation site"
FT   Domain          281..299
FT                   /note= "transmembrane domain"
FT   Modified-site   376
FT                   /note= "potential phosphorylation site"
FT   Modified-site   379
FT                   /note= "potential phosphorylation site"
XX
PN   WO200052161-A2.
XX
PD   08-SEP-2000.
XX
PF   29-FEB-2000; 2000WO-US05153.
XX
PR   01-MAR-1999;   99US-0122080.
XX
PA   (INCY-) INCYTE PHARM INC.
XX
PI   Lal P,  Yue H,  Hillman JL,  Lu DAM,  Baughn MR,  Tang YT,  Azimzai Y;
XX
DR   WPI; 2000-587310/55.
DR   N-PSDB; AAA64684.
XX
PT   Leukocyte and blood associated proteins and polynucleotides encoding
PT   them, useful for diagnosis, treatment and prevention of
PT   autoimmune/inflammatory disorders and cell proliferative disorders
PT   including cancer -
XX
PS   Claim 1; Page 65; 70pp; English.
XX
CC   The present sequence presents a human leukocyte and blood related
CC   protein, designated LBAP. LBAP polynucleotides and polypeptides are
CC   useful for treating or preventing a disorder associated with decreased
CC   expression or activity of LBAP including a cell proliferative disorder
CC   such as actinic keratosis, arteriosclerosis, atherosclerosis, bursitis,
CC   cirrhosis, hepatitis, mixed connective tissue disease (MCTD),
CC   myelofibrosis, paroxysmal nocturnal hemoglobinuria, etc., cancers
CC   including adenocarcinoma, leukemia, lymphoma, melanoma, myeloma,
CC   sarcoma, teratocarcinoma and in particular cancers of the adrenal
CC   gland, bladder, bone, bone marrow, brain, breast, cervix, etc., and
CC   an autoimmune/inflammatory disorder such as acquired immunodeficiency
CC   syndrome (AIDS), Addison's disease, adult respiratory distress syndrome,
CC   allergies, ankylosing spondylitis, amyloidosis, anaemia, asthma,
CC   atherosclerosis, autoimmune haemolytic anaemia, etc., Werner syndrome,
CC   complications of cancer, haemodialysis, and extracorporeal circulation,
CC   viral, bacterial, fungal, parasitic, protozoan, and helminthic
CC   infections, and trauma.
XX
SQ   Sequence   387 AA;

  Query Match             100.0%;  Score 1002;  DB 21;  Length 387;
  Best Local Similarity   100.0%;  Pred. No. 5.6e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
```

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          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    198 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 257

Qy     61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    258 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 317

Qy    121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    318 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 377

Qy    181 RSVQEGNPRA 190
          ||||||||||
Db    378 RSVQEGNPRA 387
```

RESULT 8
AAB83081
ID AAB83081 standard; Protein; 438 AA.
XX
AC AAB83081;
XX
DT 29-JUN-2001 (first entry)
XX
DE Human CASB6411-related partial polypeptide #1.
XX
KW Human; CASB6411; vaccine; gene therapy; immunoprophylaxis;
KW ovarian cancer; colon cancer; autoimmune disease.
XX
OS Homo sapiens.
XX
PN WO200123417-A2.
XX
PD 05-APR-2001.
XX
PF 27-SEP-2000; 2000WO-EP09500.
XX
PR 30-SEP-1999; 99GB-0023154.
PR 07-JUL-2000; 2000GB-0016839.
XX
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
XX
PI Vinals De Bassols YC;
XX
DR WPI; 2001-316133/33.
DR N-PSDB; AAF82462.
XX
PT Novel CASB6411 polypeptides useful in diagnostics, and as vaccines for
PT prophylactic and therapeutic treatment of cancers, particularly ovarian
PT and colon cancers, autoimmune diseases and related conditions -
XX
PS Disclosure; Page 66; 95pp; English.
XX
CC The present sequence is provided in a specification relating
CC to CASB6411 polypeptides comprising a sequence having at least 70%
CC identity to a sequence of 460 or 154 amino acids fully defined in
CC the specification. CASB6411 polypeptides and polynucleotides are
CC useful for treating a subject by immunoprophylaxis or therapy.
CC The CASB6411 polypeptides are useful in diagnostics, and as
CC vaccines for prophylactic and therapeutic treatment of cancers,
CC particularly ovarian and colon cancers, autoimmune diseases and related
CC conditions. CASB6411 polypeptides are also useful for the
CC structure-based design of agonists, antagonists or inhibitors of the
CC polypeptide.
XX
SQ Sequence 438 AA;

```
  Query Match            100.0%;  Score 1002;  DB 22;  Length 438;
  Best Local Similarity  100.0%;  Pred. No. 6.6e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db    249 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 308

Qy     61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    309 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 368

Qy    121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    369 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 428

Qy    181 RSVQEGNPRA 190
          ||||||||||
Db    429 RSVQEGNPRA 438
```

RESULT 9
AAB83079
ID AAB83079 standard; Protein; 460 AA.
XX
AC AAB83079;
XX
DT 29-JUN-2001 (first entry)
XX
DE Human CASB6411 protein.
XX
KW Human; CASB6411; vaccine; gene therapy; immunoprophylaxis;
KW ovarian cancer; colon cancer; autoimmune disease.
XX
OS Homo sapiens.
XX
PN WO200123417-A2.
XX
PD 05-APR-2001.
XX
PF 27-SEP-2000; 2000WO-EP09500.
XX
PR 30-SEP-1999; 99GB-0023154.
PR 07-JUL-2000; 2000GB-0016839.
XX
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
XX
PI Vinals De Bassols YC;
XX
DR WPI; 2001-316133/33.
DR N-PSDB; AAF82460.
XX
PT Novel CASB6411 polypeptides useful in diagnostics, and as vaccines for
PT prophylactic and therapeutic treatment of cancers, particularly ovarian
PT and colon cancers, autoimmune diseases and related conditions -
XX
PS Claim 1; Page 64; 95pp; English.
XX
CC The present sequence is human CASB6411 polypeptide. The
CC invention relates to CASB6411 polypeptides comprising a sequence
CC having at least 70% identity to a sequence of 460 or 154 amino acids
CC fully defined in the specification. CASB6411 polypeptides and
CC polynucleotides are useful for treating a subject by immunoprophylaxis
CC or therapy. The CASB6411 polypeptides are useful in diagnostics, and
CC as vaccines for prophylactic and therapeutic treatment of cancers,
CC particularly ovarian and colon cancers, autoimmune diseases and related
CC conditions. CASB6411 polypeptides are also useful for the
CC structure-based design of agonists, antagonists or inhibitors of the
CC polypeptide. The full length mRNA encoding the present sequence may
CC be alternatively spliced to generate a mRNA encoding a truncated
CC CASB6411 protein.
XX
SQ Sequence 460 AA;

```
  Query Match            100.0%;  Score 1002;  DB 22;  Length 460;
  Best Local Similarity  100.0%;  Pred. No. 7e-111;
  Matches  190;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
```

```
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    271 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 330

Qy     61 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    331 SIYSWIDTLSTRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRLL 390

Qy    121 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    391 HEQIINEGKDKMFLIEKLIKLQDMEKKANPSSLVLERREVEQQGFLHLGEHDGSLDLRSR 450

Qy    181 RSVQEGNPRA 190
          ||||||||||
Db    451 RSVQEGNPRA 460


RESULT 10
ABP41828
ID   ABP41828 standard; Protein; 305 AA.
XX
AC   ABP41828;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HACMU05, SEQ ID NO:2960.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; chromosome 17q25.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US18569.
XX
PR   07-JUN-2000; 2000US-209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   N-PSDB; ABQ54905.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g.
PT   ovarian cancer), immune disorders, cardiovascular disorders and
PT   neurological diseases -
XX
PS   Claim 11; SEQ ID No 2960; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
CC   sequence represents a human ovarian antigen of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   305 AA;

  Query Match             29.2%;  Score 292.5;  DB 23;  Length 305;
  Best Local Similarity   34.9%;  Pred. No. 2.8e-26;
  Matches   60;  Conservative   36;  Mismatches   63;  Indels   13;  Gaps    2;

Qy       1 MMNFQPPSKAWRASQMMTFFIFLLFFPSFTGVLCTLAITIWRLKPSADCGPFRGLPLFIH 60
           : | | : | || | | |: || ||:| |    |   :|::|||: ||||| |
Db     133 LANCQAPRRPWLASHMSTVFLTLLCFPAFLGAAVFLCYAVWQVKPSSTCGPFRTLDTMYE 192

Qy      61 SIYSWIDTL-STRPGYLWVVWIYRNLIGSVHFFFILTLIVLIITYLYWQITEGRKIMIRL 119
           :   |:  | :  |   |: |::| |: :  | |::: ::| : ||  |:  |:: :| |
Db     193 AGRVWVRHLEAAGPRVSWLPWVHRYLMENTFFVFLVSALLLAVIYLNIQVVRGQRKVICL 252

Qy     120 LHEQIINEGKDKMFLIEKLIKLQD-----------MEKKANPSSLVLERRE 159
           | ||| |||:||:||| ||  : :             |: | | :|: : ::
Db     253 LKEQISNEGEDKIFLINKLHSIYERKEREERSRVGTTEEAAAPPALLTDEQD 304


RESULT 11
ABB39891
ID   ABB39891 standard; Peptide; 31 AA.
XX
AC   ABB39891;
XX
DT   04-FEB-2002  (first entry)
XX
DE   Peptide #7397 encoded by human foetal liver single exon probe.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human fetal liver -
```

```
XX
PS   Claim 27; SEQ ID NO 32526; 639pp + sequence listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for
CC   measuring human gene expression in a sample derived from human foetal
CC   liver. The single exon nucleic acid probes may be used for predicting,
CC   measuring and displaying gene expression in samples derived from human
CC   fetal liver. The present sequence is a peptide encoded by a single exon
CC   nucleic acid probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   31 AA;

  Query Match             14.8%;  Score 148;  DB 22;  Length 31;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-10;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    131 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 161
          |||||||||||||||||||||||||||||||
Db      1 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 31


RESULT 12
AAM60631
ID   AAM60631 standard; Protein; 31 AA.
XX
AC   AAM60631;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe encoded protein SEQ ID NO: 32736.
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW   epilepsy; cancer.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00667.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains -
XX
PS   Example 4; SEQ ID NO: 32736; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is a protein encoded by one of
CC   the probes of the invention.
XX
SQ   Sequence   31 AA;

  Query Match             14.8%;  Score 148;  DB 22;  Length 31;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-10;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    131 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 161
          |||||||||||||||||||||||||||||||
Db      1 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 31


RESULT 13
AAM73303
ID   AAM73303 standard; Protein; 31 AA.
XX
AC   AAM73303;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed probe encoded protein SEQ ID NO: 33609.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00668.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4; SEQ ID NO: 33609; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is a
CC   protein encoded by one of the probes of the invention.
XX
SQ   Sequence   31 AA;

  Query Match             14.8%;  Score 148;  DB 22;  Length 31;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-10;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    131 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 161
          |||||||||||||||||||||||||||||||
Db      1 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 31


RESULT 14
AAM33503
ID   AAM33503 standard; Protein; 31 AA.
XX
```

AC AAM33503;
XX
DT 17-OCT-2001 (first entry)
XX
DE Peptide #7540 encoded by probe for measuring placental gene expression.
XX
KW Probe; microarray; human; placenta; antenatal diagnosis;
KW genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200157272-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00663.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488897/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human placenta -
XX
PS Claim 27; SEQ ID No 33772; 654pp; English.
XX
CC The present invention relates to single exon nucleic acid probes (SENP:
CC see AAI31315-AAI57546). The present sequence is a peptide encoded by one
CC such probe. The probes are useful for producing a microarray for
CC predicting, measuring and displaying gene expression in samples derived
CC from human placenta. The probes are useful for antenatal diagnosis of
CC human genetic disorders.
XX
SQ Sequence 31 AA;

Query Match 14.8%; Score 148; DB 22; Length 31;
Best Local Similarity 100.0%; Pred. No. 2.6e-10;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 131 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 161
||||||||||||||||||||||||||||||
Db 1 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 31

RESULT 15
ABG43154
ID ABG43154 standard; Peptide; 31 AA.
XX
AC ABG43154;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human peptide encoded by genome-derived single exon probe SEQ ID 32819.
XX
KW Human; single exon probe; asthma; lung cancer; COPD; ILD;
KW chronic obstructive pulmonary disease; interstitial lung disease;
KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW primary ciliary dyskinesis; pulmonary hypertension;
KW hyaline membrane disease.
XX
OS Homo sapiens.
XX
PN WO200186003-A2.
XX
PD 15-NOV-2001.
XX
PF 30-JAN-2001; 2001WO-US00665.
XX
PR 04-FEB-2000; 2000US-180312P.
PR 26-MAY-2000; 2000US-207456P.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2002-114183/15.
XX
PT Spatially-addressable set of single exon nucleic acid probes, used to
PT measure gene expression in human lung samples -
XX
PS Claim 27; SEQ ID No 32819; 634pp; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human lung comprising single exon nucleic acid probes having one of
CC 12614 nucleic acid sequences mentioned in the specification, or their
CC complements or the 12387 open reading frames derived from the 12614
CC probes. Also included are a microarray comprising the novel set of
CC probes; the novel set of probes which hybridise at high stringency to a
CC nucleic acid expressed in the human lung; measuring gene expression in a
CC sample derived from human lung, comprising (a) contacting the array with
CC a collection of detectably labeled nucleic acids derived from human lung
CC mRNA, and (b) measuring the label detectably bound to each probe of
CC the array; identifying exons in a eukaryotic genome, comprising
CC (a) algorithmically predicting at least one exon from genomic sequences
CC of the eukaryote; and (b) detecting specific hybridisation of detectably
CC labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC having a fragment identical to the predicted exon, the probe is included
CC in the above mentioned microarray; assigning exons to a single gene,
CC comprising (a) identifying exons from genomic sequence by the method
CC above and (b) measuring the expression of each of the exons in several
CC tissues and/or cell types using hybridisation to a single exon
CC microarrays having a probe with the exon, where a common pattern of
CC expression of the exons in the tissues and/or cell types indicates that
CC the exons should be assigned to a single gene; a peptide comprising one
CC of 12011 sequences, mentioned in the specification, or encoded by the
CC probes/open reading frames (ORF). The probes are used for gene
CC expression analysis, and for identifying exons in a gene, particularly
CC using human lung derived mRNA and for the study of lung diseases
CC such as asthma, lung cancer, chronic obstructive pulmonary disease
CC (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary
CC fibrosis, neurofibromatosis, tuberous sclerosis, Gaucher's disease,
CC Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pulmonary
CC haemosiderosis, pulmonary histiocytosis, lymphangioleiomyomtosis,
CC pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic
CC pulmonary dysplasia, primary ciliary dyskinesis, pulmonary hypertension
CC and hyaline membrane disease. The present sequence is a peptide/protein
CC encoded by a single exon probe of the invention.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 31 AA;

Query Match 14.8%; Score 148; DB 23; Length 31;
Best Local Similarity 100.0%; Pred. No. 2.6e-10;

Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy     131 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 161
           |||||||||||||||||||||||||||||||
Db       1 KMFLIEKLIKLQDMEKKANPSSLVLERREVE 31
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Search completed: November 9, 2002, 04:30:32
Job time : 81 secs